

Division of Waste Management Solid Waste Section

UNIT	UNIT TYPE:											
Lined MSWLF		LCID		YW		Transfer		Compost	X	SLAS		COUNTY: Chatham
Closed MSWLF		HHW		White goods		Incin		T&P		FIRM		PERMIT NO.: 19-05 SWC
CDLF		Tire T&P / Collection		Tire Monofill		Industrial Landfill		DEMO		SDTF		FILE TYPE: COMPLIANCE

Date of Site Inspection: January 10, 2013 Date of Last Inspection: January 17, 2012

FACILITY NAME AND ADDRESS:

Brooks Compost Facility – Large, Type 3 Solid Waste Compost Facility 1195 Beal Road Goldston, NC 27252

GPS COORDINATES: N: <u>35.54431</u> E: <u>-79.36780</u>

FACILITY CONTACT NAME AND PHONE NUMBER:

Alan Brooks, Site Manager Brooks Contractor, Inc. w. 919-837-5914 f. 919-837-5097 c. 919-842-0010

alan@brookscontractor.com

FACILITY CONTACT ADDRESS:

Alan Brooks, Site Manager Brooks Contractor, Inc. 1195 Beal Road Goldston, NC 27252

PARTICIPANTS

John Patrone, Environmental Senior Specialist - Solid Waste Section (SWS) Alan Brooks, Site Manager - Brooks Contractor, Inc. Amy Brooks - Brooks Contractor, Inc.

STATUS OF PERMIT:

Permit To Operate (PTO) issued January 22, 2010 PTO expiration date January 22, 2015

PURPOSE OF SITE VISIT:

Comprehensive Inspection

STATUS OF PAST NOTED VIOLATIONS:

None

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OBSERVED VIOLATIONS

None

The item(s) listed above were observed by Section staff and require action on behalf of the facility in order to come into or maintain compliance with the Statutes, Rules, and/or other regulatory requirements applicable to this facility. Be advised that pursuant to N.C.G.S. 130A-22, an administrative penalty of up to \$15,000 per day may be assessed for each violation of the Solid Waste Laws, Regulations, Conditions of a Permit, or Order under Article 9 of Chapter 130A of the N.C. General Statutes. Further, the facility and/or all responsible parties may be subject to enforcement actions including penalties, injunction from operation of a solid waste management facility or a solid waste collection service and any such further relief as may be necessary to achieve compliance with the North Carolina Solid Waste Management Act and Rules.

ADDITIONAL COMMENTS

On January 10, 2013, John Patrone met with Alan Brooks and Amy Brooks to conduct a comprehensive inspection of the Brooks Compost Facility – Large, Type 3 Solid Waste Compost Facility on Beal Road in Goldston, Chatham County.

- 1. The facility is a Large, Type 3 Solid Waste Compost (SWC) Facility. It produces compost from eggshell/hatchery waste, food waste (pre-consumer and post-consumer), yard waste (primarily leaves), wood mulch, animal bedding, grease trap waste, etc. (as listed on page 5 of the current Facility Operations & Maintenance Manual) and additional materials approved by the Division of Waste Management (DWM).
- 2. Material is received from numerous counties within North Carolina and counties in South Carolina, Tennessee, and Virginia.
- 3. The facility permit, site map, and operations plan were discussed.
- 4. The compost produced is primarily sold to construction and landscape contractors and landscape supply businesses.
- 5. Compost can be mixed with sand, pine bark fines, PermaTill, or per custom blend.
- 6. The facility estimates 1 yd³ of compost weighs 1300 lbs.
- 7. Compost operation is conducted on ~ 25 acres.
- 8. The facility is in operation Monday through Friday 7:00 am to 5:00 pm and Saturday 8:00 am to 12:00 pm (March through November).
- 9. Liquid material is dumped into a liquids bulking and mixing pit and semi-liquid material is unloaded onto an adjacent cement pad.
- 10. Liquid material is mixed with absorbent bulking material and placed on the concrete pad to allow remaining liquid to drain-off.
- 11. The materials concrete pad has drain grates that capture the leachate from material and allow it to flow to two 3,500 gallon cement storage tanks. The cement storage tanks are used to settle-out sludge and particulate material. A 10,000 gallon steel storage tank is used to store the leachate drained from the two cement storage tanks. The leachate is pumped-out and used on compost windrows.
- 12. Odorous material is incorporated into windrows upon delivery. Windrows are covered with a layer of uncured compost.
- 13. Other wastes are stockpiled for a few days until enough is on-hand to create a windrow.
- 14. The facility commonly uses leaves, cardboard, mulch, and yard waste as bulking material.
- 15. During the fall and early winter, the facility receives leaves from the town of Cary and Siler City. The leaves are stockpiled for use, maintained accordingly.
- 16. Windrows appeared to be within required dimensions. Eggshell windrows are commonly 350 feet in length and non-eggshell windrows are commonly 200 feet long.
- 17. During the inspection the facility had 32 active windrows.
- 18. Active windrows are organized into separate operational areas: eggshell and non-eggshell.
- 19. The facility uses a windrow-turning machine to turn active windrows. Windrows are constructed with a front end loader.
- 20. Windrows are commonly maintained for ~5 months. The material is generally cured for an additional 12 months.
- 21. Compost is screened prior to sale and stored in a large pile.

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- 22. Stockpiled finished product is limited to a height of 60 feet.
- 23. The facility operational capacity is limited to 75,000 tons of feedstocks per year received for composting.
- 24. The facility annual report (FAR) was received by the SWS, dated July 27, 2012. Material received for July 2011 through June 2012 is 61,947.81 tons. And the amount of compost produced is 32,168.97 tons.
- 25. The facility maintains records of the amount of material received for processing. The amount of material received from July 2012 through January 9, 2013 is 29,105.5 tons. The amount of compost sold from July 2012 through January 10, 2013 is 12,997.2 tons. And the amount of cured compost on site as of January 10, 2013 is 41,064.5 yd³.
- 26. The facility produces Grade A compost and offers an information pamphlet for customers.
- 27. Windrow records were verified. The facility maintains written windrow data. Records for temperature, moisture level, turning intervals, bulk density, and C:N calculation were observed for windrows formed on 02/24/12 taken up on 07/05/12, 07/06/12 taken up on 12/05/12, and 08/25/12 taken up on 01/04/13. The facility uses Green Mountain Technologies, Inc. windrow manager software. The program allows the facility to electronically maintain active windrow data, calculate windrow bulk density and C:N ratio, and record and graph data.
- 28. Windrow turning records show that the facility turns windrows at least five times during the high temperature period. Ms. Brooks stated that windrow temperature is monitored more than the required 15 days at $\geq 131^{\circ}$ F.
- 29. The moisture level is measured by hand per the method outlined in the current Facility Operations & Maintenance Manual, pg 12.
- 30. Compost analysis records were verified for nutrients, metals, manmade inerts, and fecal coliform samples taken June 29, 2012 and November 20, 2012. The samples were analyzed by Soil Control Lab, Watsonville, CA. Ms. Brooks stated that the facility plans to conduct samples monthly. Additionally, nutrient samples are provided monthly for analysis by the North Carolina Department of Agriculture & Consumer Services (NCDA&CS) Agronomic Services Division.
- 31. The facility has a dedicated water truck for dust control.
- 32. There was no odor detected at the facility boundary.
- 33. The facility has not received an odor complaint.
- 34. Erosion and sedimentation controls appeared to function accordingly. Mr. Brooks stated that routine maintenance is required.
- 35. The facility has a clay-lined stormwater pond. Stormwater is pumped-out to be used in the active windrow process. The facility does not discharge stormwater from the containment pond but may pump it out and have it hauled to the Siler City Wastewater Treatment Plant if a sufficient amount is not used.
- 36. Mr. Brooks stated that a stormwater discharge permit is not required because stormwater remains onsite.
- 37. The facility has submitted data to the Division of Water Quality (DWQ) regarding a containment pond irrigation project. It is planned that a pipe from the stormwater pond will be buried underneath the active compost area to an adjacent field. When sufficient stormwater is available, the facility can irrigate three fields with a portable irrigation sprinkler. If the project is pursued, ensure it is discussed with SWS Permitting Branch prior to construction.
- 38. The Goldston Fire Department will be contacted to address an emergency at the facility. Fire lanes were maintained.
- 39. The facility is secured by locked metal gate (the Brooks' residence is located at entrance drive to facility). Facility personnel are on site during operating hours.
- 40. Access roads are of all weather construction.
- 41. The facility has proper signage.
- 42. The PTO expiration date is January 22, 2015.
- 43. The PTO renewal application should be submitted to the SWS by September 22, 2014.

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Please contact me if you have any questions or concerns regarding this inspection report.

John Patrone

Environmental Senior Specialist Regional Representative

Phone: <u>336-771-5</u>	5095 Fax:	<u>336-77.</u>	1-4631

Sent on: <u>January 14, 2013</u>	X	Email	Hand delivery	US Mail	Certified No. [_]

Copies: Jason Watkins, Western District Supervisor

Jessica Montie, Compliance Officer

Tony Gallagher, Environmental Supervisor

Liz Patterson, Composting and Land Application Branch

Amy Brooks, Brooks Contractor, Inc., amy@brookscontractor.com

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Digital pictures taken January 10, 2013 by John Patrone, DWM-SWS

Liquids bulking and mixing pit – grease trap waste



Windrow turner – turning eggshell windrows



Non-eggshell windrows



Cured compost pile

